LAKE OKEECHOBEE FLORIDA RANCHLANDS ENVIRONMENTAL SERVICES (FRESP) PROJECT

Background:

Initiatives to identify options for storage and/or disposal of excess surface water to aid in reducing lake levels and high discharge volumes to the estuaries have been developed to help restore the ecological health of Lake Okeechobee and the adjoining estuaries. Assessments of available public and tribal lands for storage of excess surface water have been completed for the watershed, with assessments continuously ongoing for private lands. In October 2005, a program was designed in which ranchers in the Northern Everglades sell environmental services of water retention, TP load reduction and wetland habitat expansion to agencies of the state and other willing buyers. These ranches can bring services online quickly as compared to other options and are planned to complement public investment in regional water storage and water treatment facilities. The sale of the services is expected to provide additional income for ranchers that face low profit margins and to provide an incentive against selling land for more intensive agriculture and urban development—land uses that could further aggravate water flow, pollution, and habitat problems.

Project Overview:

FRESP is being implemented through collaboration among World Wildlife Fund, eight participating ranchers, NRCS, and state agencies—FDACS, the District, and the FDEP. Technical support is being provided by scientists from the MacArthur Agro-Ecology Research Center and UF. Funding from federal, state, and private sources exceeds $6 million for Phase One (pilot project implementation and program design).

One key accomplishment of FRESP is the development of procedures to compare protocols for documenting environmental services from ranchlands. FRESP is expected to field test different methods of monitoring and modeling of hydrology, water and soil chemistry, and vegetation change to document the level of environmental services provided by ranch water management projects.

Project Status:

Four FRESP water management projects have been designed, constructed, and are instrumented to capture hydrological and chemical data. Alderman-Deloney Ranch is located in the C-25 basin which is not part of the Lake Okeechobee Watershed. Data collection started in 2007 and is planned to continue through the end of the pilot project in 2011. Additional water management projects are to be implemented by four additional ranchers. Projects include rehydrating drained wetlands, water table management, and pumping water from a nearby off-site canal through the existing ranch and then back into the canal.